

IN THE CLAIMS:

Please amend the claims as follows:

Sub EI  
5. (Amended) A pull-up transistor for use with a Vdd terminal and an I/O pad of a semiconductor device comprising:

a semiconductor substrate of a first conductive-type;

a source region and a drain region of a second conductive type formed in the substrate and defining between them a channel region, one of the source region and the drain region being coupled with the I/O pad, the other one of the source region and the drain region being coupled with the Vdd terminal;

a<sup>2</sup>  
an impurity implantation region of impurities of a second conductive-type formed in a first sector of the channel region, the first sector not reaching [at most] either one of the source region and the drain region, wherein the channel region exclusive of the first sector has a uniform doping concentration of the first conductive type;

a gate insulating layer on the substrate over at least a portion of the impurity implantation region and over at least a portion of an area adjacent the impurity implantation region; and

a gate on the gate insulating layer over at least a portion of the first sector and over at least a portion of a region adjacent to the first sector.

Please cancel claim 8 without prejudice.

a<sup>3</sup> Sub C'  
9. (Amended) The transistor of claim [8] 5, wherein the first sector is separated from the source region and from the drain region by equal distances.

REMARKS

Prior to this Response, the Examiner issued a Restriction Requirement, and Applicant elected claims 5-9.

In the Office Action,